CITY OF SALISBURY

Analysis of Proposed Broadband System Lease and Business Plan

FINAL REPORT

March 27, 2018

BAKER TILLY

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0.0 INTRODUCTION

Project scope

Baker Tilly Virchow Krause, LLP ("Baker Tilly") was engaged by the City of Salisbury ("City") to perform an analysis of revenue projections and rent payments to the City under a proposed lease by the City by a third party of the City's Fibrant fiber-optic communications system (Fibrant) and a comparison of such projected payments to the City's own forecasted operating results if the City were to continue to operate Fibrant.

The Baker Tilly project team consisted of professionals from our Energy and Utilities Team and we were assisted by Mr. Ron Holcomb. Mr. Holcomb is a 30-year veteran of the electric and communications utility industry with extensive experience in power supply, advanced grid technologies, essential service operations, economic development and value-driven growth initiatives for combined electric and telecommunication utilities. During his career, he has lead three utilities as President/CEO and provided management consulting to utilities across the country.

The scope of services for this project included:

1. Evaluate the proposed lease agreement to identify key assumptions used in the projected cash flows available to the City.
2. Conduct a phone conference with management of the third-party lessee to assess the business plan for Fibrant including:
   - Projected revenues and expenses
   - Customer penetration rates used to develop the projected revenues in the business plan
3. Assess industry trends and Fibrant's competitive position within the market including an assessment of proposed pricing for services and customer take rate projections compared to other markets
4. Perform a sensitivity analysis on the third-party lessee's revenue projections and the related impact on cash flows
5. Evaluate and analyze Fibrant's historical operating costs
6. Compare the expected lease payments to the City to projected operating results if the City were to continue to operate Fibrant and achieve the same revenues projected by the third-party lessee.

This report contains our observations resulting from the scope of services provided to the City. Where appropriate, we have noted any considerations for the City to review further and assess. The specific observations are located in each section of the report.

We would like to thank the personnel of the City, Fibrant and Hotwire for their assistance, cooperation and insights in providing information and discussions during our due diligence process. Their assistance was invaluable in completing this report.

The services performed by Baker Tilly on this project and its Agreement with the City do not include the provision of legal advice and Baker Tilly makes no representations regarding questions of legal interpretation. The City should consult with its attorney with respect to any legal matters or items that require legal interpretation, under federal, state or other laws or regulations.

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1.0 EVALUATION OF PROPOSED LEASE AGREEMENT

1.1 – Scope Task: Evaluate the proposed lease agreement to identify key assumptions used in the projected cash flows available to the City.

This portion of the scope of services centered on the initial review of the proposed lease agreement and a review of the third party's projected cash flows available to the City based on the third party's projection of operating the Fibrant System.

1.2 – Procedures

Baker Tilly performed the following procedures to evaluate the proposed lease agreement:

1. Reviewed the draft proposed Transition Management Agreement and Lease (lease agreement) between the City of Salisbury and the third party provider, Hotwire Communications, Ltd. (Hotwire) to verify stated revenue percentages for communication services to be provided.

2. Identify key charges or revenue percentages for different communication services that the City would receive from Hotwire through the lease agreement.

1.3 – Observations

In reviewing the stated lease agreement, we verified the revenue percentage share that Hotwire would pay the City for the current communication services being provided as:

- Internet: 30%
- Cable: 10%
- Video: 10%

These amounts would be paid to the City based on the revenues generated by customers taking each type of service.

The proposed lease agreement also states revenue percentage shares that Hotwire would pay the City for additional communication services that Fibrant currently does not provide, including:

- Data Center Service: 20%
- Data Transport Service: 25%
- Dark Fiber Service: 30%
- Dim Fiber Service: 10%
- Other Services: 10%

Further, per the proposed lease agreement, Hotwire is to pay quarterly "rents" to the City, based on the difference between (1) the applicable rent percentage from the communication service revenues and (2) the Drop/NID installation charges. The City will receive a credit against its rent payment for any drops and network interface devices (NIDs) that it installs. The lease agreement defines the following Drop/NID installation charges:

- Aerial Path Charge: $3.00 per linear foot of fiber drop cable installed aboveground between a NID and an optical fiber terminal port, whether self-supporting, installed in vertical risers, or attached to messenger strand, excluding cable storage loops.
- New Underground Path Charge: $10.00 per linear foot of fiber drop cable installed in a new underground pathway constructed between the NID and the nearest accessible point of the existing Outside Plant, whether consisting of new conduit or direct buried cable, excluding cable storage drops.
- Existing Underground Path Charge: $2.00 per linear foot of fiber drop cable installed underground in existing Outside Plant conduit pathway between a NID and an optical fiber terminal port, excluding storage loops.
- Fixed Installation Charge: $150.00 per customer installation to cover all estimated labor and material costs that are fixed relative to cable pathway length, including cable slack loops, NID installation, splicing, cable termination, and mobilization.

Since the number of drops and NID installations in the future is not known, the credit amount is currently not reflected in Hotwire's projected cash flow.

2.0 FIBRANT BUSINESS PLAN ASSESSMENT

2.1 – Scope Task: Conduct a phone conference with management of the third-party lessee to assess the business plan for Fibrant:

- **a. Projected revenues and expenses**
- **b. Customer penetration rates used to develop the projected revenues in the business plan**

This portion of the scope of services involved documenting the key assumptions used by the third party lessee to project revenues, expenses and customer penetration rates.

2.2 – Procedures

Based on information provided by both the City and Hotwire, Baker Tilly took the following steps to assess the overall business plan for Fibrant:

1. Reviewed the third party's proforma model
2. Discuss model assumptions with Hotwire management to gain understanding and insights
3. Identified and summarized key assumptions in Hotwire's proforma model and overall business operations
4. Reviewed Fibrant's current subscriber count and proposed rates
5. Reviewed Hotwire's proposed subscriber count and proposed rates and compared against those of Fibrant

2.3 – Observations

In the review of the documents provided and in discussions with Hotwire, we identified the following key assumptions used in Hotwire's proforma model[1] and the projected cash flows to the City:

1. *Escalation and Take Rates*

    a. The proforma model assumes an initial decline in the take rate for the residential sector of 12.5% during the seven month initial ramp up between September 2017 and March 2018, as Hotwire expects some of Fibrant's current customer base will drop off during the transition.

    b. Overall broadband service rates for both the residential and commercial sectors are projected to increase 2% rate annually (starting in April 2018) across the entire customer base.[2]

[1] Baker Tilly did not prepare any projections or forecasts in connection with this project. We are commenting on the projection prepared by Hotwire

[2] It should be noted that while the overall collection of broadband service rates increase 2%, actual subscription rates for different broadband services and packages may vary.

   c. Overall residential broadband subscriber counts are projected to increase 6% in April 2018, increase 8% in April 2019, and again 8% in January 2020; subscriber counts ratchet downward from 8% in year 2021 to 1% in year 2025 at which point Hotwire projects they will have reached maximum residential customer base.
      i. Given Fibrant is the overbuilder, not the incumbent, Hotwire projects the maximum take rate at 40%.
   d. The take rate for the commercial sector was based on a conservative estimate that Hotwire would be able to obtain approximately 33% of the existing Fibrant commercial sector revenue. Similar to the residential sector, subscriber counts or projected revenues increase 6% in April 2018, increase 8% in April 2019, increase only 5% in 2020 and 2021, increase back to 8% in 2022, before ratcheting downward to 1% in year 2023 at which point Hotwire projects they will have reached the maximum commercial sector customer base.
   e. No security take rate was assumed.

2. *Revenue Share*

   a. The projected cash flows assume a revenue cost share to the City for the following broadband services:
      i. Internet: 30%
      ii. Cable: 10%
      iii. Video: 10%

3. *Future Events*

   a. Fibrant's current transmission agreements with cable broadcast networks are set to expire in 2020; these agreements typically last three years. Hotwire indicates municipal service providers might face challenges to re-negotiating the transmission agreements with the cable broadcast networks, but that Hotwire would have significantly more leveraging power given its larger presence in the market.
   b. With the re-negotiating of transmission agreements in 2020, projected subscription rates are not as high for this year compared to other years.

4. *Expenses*

   a. Hotwire anticipates it would be able to assume Fibrant’s operations with minimal additional operating costs, given its ability to share certain administrative and overhead costs across multiple markets.
   b. In some instances, Hotwire indicates that Fibrant is currently paying relatively high premiums compared to the overall broadband industry.
   c. In the proposed lease agreements, the City would not be responsible for operating expense costs for the Fibrant system.

To make observations of subscriber count and subscriber rates, Baker Tilly used residential subscriber data provided by Fibrant to compare against Hotwire's prepared projections; as detailed subscriber data breakdown for commercial customers was not available. We feel that using Fibrant's current subscriber data allows us to understand the variety of the broadband services that Fibrant currently provides when compared to that of Hotwire, beyond just the three main categories of broadband services (i.e., internet, cable, and video). We used Hotwire's format from its proforma forecast to create a subscription comparison chart that is shown in Table 1.

The subscriber data provided is organized based on the type of broadband service and number of subscribers. Overall, Hotwire's proposed subscriber count in telephone and internet service is lower compared to Fibrant's actual subscriber counts. Consistent with our conversations with Hotwire, Hotwire's proforma projection takes into consideration a decline in subscribers during the onset of its operations.

After reviewing Fibrant's subscription data and Hotwire's projections, it is noted that both providers have slightly different broadband service offerings or packages. For instance, Fibrant offers five video packages while Hotwire only offers four. Hotwire has eliminated the Basic plan and moved its consumers to the Digital Access plan. It is our understanding that Hotwire's most basic plan is Digital Access, which is comparable to Fibrant's current Bronze Plan. We also have observed that Hotwire's projections do not contain subscriptions and service rates for certain Fibrant specific service offerings (e.g., additional phone line, Caller ID), which can result in slightly different pricing totals as compared to Fibrant's pricing options.

Table 1 – Fibrant and Hotwire Residential Subscription Comparison Chart – Fiscal Year 2018

Proposed Hotwire Service Name	Fibrant Current Service Name	Projected Hotwire Penetration Rate	Hotwire Proposed Subscribers	Fibrant Current Subscribers	Notes
Retail Revenue (Video)					
N/A	Basic	N/A	N/A	134	Fibrant currently offers a Basic package; Hotwire does not have a comparable plan.
Digital Access	Bronze	25%	1380	1246	
Digital Favorites	Silver	10%	304	304	
Digital Premium	Gold	5%	117	117	
The Works	Platinum	15%	21	21	
Premium Channels (Video)					
HBO	HBO	10%	106	106	
Showtime	Showtime	10%	32	32	
Cinemax	Cinemax	5%	16	16	
Starz	Starz	5%	120	120	
Sports	Sports	7%	0	0	
En Espanol	En Espanol	5%	8	8	
Included Boxes	N/A	0%	1423 DVR/ 1589 STB Currently Deployed	N/A	
HD Boxes	N/A	150%	2006	2006	
DVR Boxes	N/A	50%	32	32	
Total HD Boxes	N/A	N/A	N/A	N/A	
Total DVR Boxes	N/A	N/A	32	N/A	
HDTV	N/A	0%	0	0	
Multiroom DVR	N/A	20%	0	0	
Internet + Phone					
Internet	N/A	40%	2762	3502	Fibrant offers three internet packages (Velocity, Velocity-X, 50x50 Internet); Hotwire has a single package with the presented rate.
N/A	Velocity	N/A	N/A	N/A	
N/A	Velocity X	N/A	N/A	N/A	
N/A	50 x 50 Internet	N/A	N/A	N/A	
N/A	50 x 50 Internet + Phone	N/A	N/A	N/A	Fibrant offers packages that include internet and phone to its customers which is not outlined in Hotwire's proposed rate structure.
N/A	50 x 50 Internet + Phone + Video (Bronze)	N/A	N/A	N/A	Fibrant's packages would include internet, phone, and Bronze video (Digital Access Video Package).

Proposed Hotwire Service Name	Fibrant Current Service Name	Projected Hotwire Penetration Rate	Hotwire Proposed Subscribers	Fibrant Current Subscribers	Notes
Phone	N/A	30%	1017	2623	Fibrant offers a phone line at $45.00 per month and $25 a month for each additional line. It appears that Hotwire does not specify additional phone line charges or additional service costs (e.g., Caller ID, Fax).
N/A	Additional Phone Line		N/A	84	
Security	N/A	5%	0	0	
Advertising	N/A	100%	1822	1822	Based on the total subscription count for video services.
Wiring Maintenance	N/A	5%	130	130	
Digital Cable Recovery Fees	N/A	100%	1822	1822	Based on the total subscription count for video services.

3.0 FIBRANT MARKET ANALYSIS

3.1 – Scope Task: Assess industry trends and Fibrant's competitive position within the market including an assessment of proposed pricing for services and customer take rate projections compared to other markets

This portion of the scope of services involved comparing Fibrant's position in the Salisbury market with that of Fibrant's competitive peers.

3.2 – Procedures

The following steps were undertaken to perform a review of Fibrant's competitive position within the market:

1. Summarized the market value proposition for each of the competitive providers
2. Reviewed pricing of broadband services from other competitive providers
3. Performed a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis of each of the providers
4. Summarized the overall competitive market

3.3 – Observations

Competitive Review

This competitive review serves as a brief discussion of market forces, cursory reviews of each major competitor, and the likely impact of competitive dynamics in the Salisbury market.

As is seen in this section, given the similarities of the communication products and services in Salisbury, no competitor is able to draw a differential advantage. As the inability to differentiate yields to commoditization, price becomes the primary differentiator. This especially holds true for residential services where the service is fairly standardized. When price is the pivotal service attribute in the market, the competitor that can deliver the product or service at the lowest cost ultimately remains while other providers either exit the market or settle for lower margins—if owners or shareholders accept that outcome.

A crucial competitive element related to managing costs is described in the widely adopted Porter's Five Competitive Forces model. Specifically, the Bargaining Power of Suppliers is a crucial factor in the total cost-of-goods sold for any retailer. Retailers that can purchase wholesale products in bulk (reducing the bargaining power of suppliers) enjoy better pricing than retailers who have little to no market power. Therefore, in a competitive market where the primary differentiation is price, large retail service providers usually enjoy higher margins than a smaller provider who has to pay more for their cost-of-goods. Unless the smaller provider finds a non-price differential advantage, long-term market participation is unlikely.

Major Competitors in Marketplace

1. AT&T

Market Value Proposition

AT&T is one of the largest communications services providers in the marketplace with a market cap of $220 billion, with 120 million wireless subscribers, 20 million access line subscribers, and 16 million broadband subscribers constituting a nationwide 34 percent market share.[3] AT&T is well diversified offering a wide range of services residential services including landline voice, video, data and mobile phone services, and lucrative commercial communication services including network management services, cyber-security services, and cloud services to name a few.[4] AT&T's scale and diverse portfolio make it a one-stop shop for consumers of communication services of any scale and/or sector. The following tables present some information on pricing of AT&T's services.

Table 2 – AT&T Residential Internet Pricing

Service	Promotional Price	Regular Price	Notes
50 Mbps	$40	$70	1000 GB/month data cap
100 Mbps	$60	$80	1001 GB/month data cap
1000 Mbps	$80	$90	No data cap

Table 3 – AT&T Residential Video (U-Verse)

Service	Promotional Price	Regular Price	Notes
150 Channels	$35	$81	Promo Price – 12 months
470 Channels	$73	$119	Promo Price – 12 months
550 Channels	$110	$147	Promo Price – 12 months

AT&T offers a bundled residential phone service at $19.95 per month.

Strengths, Weaknesses, Opportunities, and Threats (SWOT):

The following are selected SWOT points for AT&T:

> Strengths
- Ability to deliver services over a number of infrastructure platforms
- Ability to bundle traditional triple play with wireless voice services (Quad Bundle)
- Strong marketing and brand exposure
- Ability to leverage scale to manage costs

[3] https://www.marketing91.com/swot-analysis-att/
[4] https://www.business.att.com

> Weaknesses
  - Speed to market due to organizational scale and complexity[5]

> Opportunities
  - Acquisitions – strengthening negotiating power
  - Leveraging 5G network capabilities

> Threats
  - Increasingly competitive landscape squeezing market prices

Table 4 – Customer Satisfaction – AT&T

Telecommunication Service	AT&T	Average Other Providers
Internet	69	64
TV Services	70	64
Phone Services	71	70

Source: American Customer Satisfaction Index Score[6]

2. Spectrum

Market Value Proposition

Spectrum has 91,000 employees and provides communication services to over 26 million consumers in over 40 states.[7] Charter Communications (branded Spectrum), is the 2nd largest cable provider in the US behind Comcast. In recent years, Charter has strengthened its market position through acquisitions of Time Warner Cable and Lighthouse. Customer satisfaction remains a challenge where ASCI scores are average. The following tables present some information on pricing of Spectrum's services.

Table 5 – Spectrum Residential Internet Pricing

Service	Promotional Price	Regular Price	Notes
100 Mbps	$44.99	$64.99	No data cap
300 Mbps	$69.99	$89.99	No data cap

Table 6 – Spectrum Residential Video (Bundled)

Service	Promotional Price	Regular Price	Notes
125 Channels	Varies (Bundled)	$59.99	Promo Price – 12 months
175 Channels	Varies (Bundled)	$79.99	Includes some premiums
200 Channels	Varies (Bundled)	$99.99	Includes premiums

Spectrum offers a bundled residential phone service at $29.95 per month.

[5] http://www.valueline.com/Stocks/Highlight.aspx?id=16855#.WrKgiZPwbOQ
[6] http://www.theacsi.org/acsi-benchmarks/benchmarks-by-industry
[7] https://newsroom.charter.com/company-profile/

SWOT

The following are selected SWOT points for Spectrum.[8]

> Strengths
  – Geographic footprint
  – Topline revenue growth – primarily through programming proceeds

> Weaknesses
  – Customer satisfaction

> Opportunities
  – Continued mergers and acquisitions

> Threats
  – Projected decline in linear video and growth of OTT video providers

Table 7 – Customer Satisfaction – Spectrum

Telecommunication Service	Spectrum	Average Other Providers
Internet	65	64
TV Services	63	64
Phone Services	70	70

Source: American Customer Satisfaction Index Score[9]

3. Fibrant

For comparative purposes, the following tables present a summary of Fibrant's pricing.

Table 8 – Fibrant Residential Internet Pricing

Service	Promotional Price	Regular Price	Notes
50 Mbps	Not available	$45	
75 Mbps	Not available	$65	
100 Mbps	Not available	$85	
100 Mbps	Not available	$105	

[8] http://www.valueline.com/Stocks/Highlights/Charter_Communications__A_Short_SWOT_Analysis.aspx#.WrRUoJPwbOQ
[9] http://www.theacsi.org/acsi-benchmarks/benchmarks-by-industry

Table 9 – Fibrant Residential Video (Bundled)

Service	Promotional Price	Regular Price	Notes
Basic	Not available	$48	
Bronze	Not available	$85	
Silver	Not available	$111	
Gold	Not available	$116	
Platinum	Not available	$179	

Spectrum offers a bundled residential phone service at $45 per month.

Porters Five Forces

Porter's Five Forces is an analysis tool, which identifies forces that shape industry profitability. These five forces are:

> rivalry among industry competitors
> threat of new entrants
> threat of substitute products or services
> bargaining power of buyers
> and bargaining power of suppliers

This model is particularly useful as it highlights key conditions in the marketplace where Fibrant competes.

a) Rivalry among industry competitors

The rivalry among most telecom competitors can be described as relatively intense provided they have similar technological capabilities where service performance is relatively the same. The intensity manifests itself in singling out price as the major differentiator. Those competitors with multiple markets and sizable balance sheets are usually in an advantageous position to withstand drawn out price competition. Given their scale, Spectrum and AT&T can compete in low margin markets for extended periods of time posing significant risk to smaller operators.

b) Threat of new entrants

The threat of new entrants is the Salisbury market is likely low given the saturation of service providers in the market.

c) Threat of substitutes

In the communication marketplace, the threat of substitutes at this point and time applies primarily to products that are migrating away from traditional delivery technology and business models. The products are phone (especially residential) and liner video. Substitute IP based services can usually only be monetized by the infrastructure provider through the Internet pipe or through OTT subscriptions. All communication providers are challenged with making the transition and/or phasing out vintage delivery models and revenue streams.

d) Bargaining power of customers

In a communications marketplace where product/service differentiation is increasingly difficult, retail price competition works in the customer's favor. The price competition often takes the form of introductory rates and pricing gimmicks. At times, consumers bounce from one provider to the other seeking the best short-term rate.

In cases where differentiation is possible, commercial communication services for example, where advanced voice, cloud services, multiple redundant paths and other similar services are required, larger competitors with broader market recognition tend to capture most of the market. Here, while the consumer has some bargaining power, the focus is on reliability and trust. Customer bargaining is related more to the service providers' ability to offer full solution sets as opposed to a single service and price.

e) Bargaining power of suppliers

For backhaul, video programming, and voice management/switching, the bargaining power of the supplier decreases as the size of the retail service provider increases. For large service providers like AT&T and Spectrum, this condition creates a decisive competitive advantage in their cost to do business. For large market players, the cost of goods to serve a retail customer can be magnitudes less than the cost of goods borne by a smaller service provider. This critical telecom market attribute is often the reason smaller service providers have higher per-unit costs, higher prices and thinner margins.

Market Summary

- The retail prices of the competitors do not differ dramatically indicating a rather competitive residential communications marketplace with little differentiation.
- Competitive sustainability is largely dependent on each service provider's ability to manage costs.
- The bargaining power of suppliers is significantly reduced when services providers like AT&T and Spectrum purchase for and represent the bulk of the marketplace.
- Porter's Bargaining Power of Suppliers may be the single largest factor smaller service providers have to overcome in a communications marketplace where purchasing power is concentrated within a small group of large competitors.

4.0 SENSITIVITY ANALYSIS

4.1 – Scope Task: Perform a sensitivity analysis on the third-party lessee's revenue projections and the related impact on cash flows

In this area, we reviewed the sensitivity of Hotwire's projection to variables in the subscriber take rate and impacts of changes in expenses.

4.2 – Procedures

Based on information provided by both the City and Hotwire, Baker Tilly took the following steps to perform a sensitivity analysis on Hotwire's revenue projections and corollary impact to the City's cash flows:

1. Reviewed the third-party lessee's revenue projections

2. Based on key parameters (or drivers) to the revenue projections, performed a sensitivity analysis of changes to Hotwire's projected revenues and the City's cash flow

4.3 – Observations

Performing a sensitivity analysis is important in determining what impact slight changes to key drivers can have on overall revenue projections and also to the City's cash flow.

The biggest variable in the overall revenue projections is the projected number of broadband service subscribers. Based on observations made in Section 2, the overall Hotwire projected residential subscriber counts for FY 2018 are lower than that of Fibrant's current residential subscriber counts. With that being said, the overall broadband service subscriber count may vary in the first year of a new third party lease operations.

Hotwire's overall FY 2018 total revenue projections (excluding bad debt) was projected to be $4,703,192. However, this figure did not include the first two months of FY 2018 (i.e., July and August 2017). As the months of September 2017 through March 2018 have the same monthly revenue projections at $459,296, we recalculated the total FY 2018 revenues to be $5,621,785 to include the two missing months (i.e., July and August 2017). This annual revenue value was used as the basis point for the sensitivity analysis as shown in Table 10.

Table 10 – Sensitivity Analysis – Projected Hotwire Revenues – FY 2018

Subscriber Count Targets	Total Projected Hotwire Revenues	Difference in Revenues Compared to 100% Subscriber Count
120%	$6,746,141	$1,124,357
115%	$6,465,052	$843,268
110%	$6,183,963	$562,178
105%	$5,902,874	$281,089
100%	**$5,621,785**	**$0**
95%	$5,340,695	($281,089)
90%	$5,059,606	($562,178)
85%	$4,778,517	($843,268)
80%	$4,497,428	($1,124,357)

Table 11 – Sensitivity Analysis – Projected Salisbury Share of Revenues – FY 2018

Subscriber Count Targets	Total Projected Salisbury Share of Revenues	Difference in Revenues Compared to 100% Subscriber Count
120%	$1,249,498	$208,250
115%	$1,197,436	$156,187
110%	$1,145,374	$104,125
105%	$1,093,311	$52,062
100%	**$1,041,249**	**$0**
95%	$989,186	($52,062)
90%	$937,124	($104,125)
85%	$885,061	($156,187)
80%	$832,999	($208,250)

As can be seen in Table 10, an overall range of subscriber counts from 80% to 120% can have an impact on overall Hotwire revenues between $4.5 million and $6.7 million. On the corollary, in Table 11, the same overall range of subscriber counts from 80% to 120% can have an impact on Salisbury's share of revenues between roughly $833,000 and $1.2 million.

While Baker Tilly does not give a formal opinion on the Hotwire projection, we re-calculated the amounts in their projection and based on the Hotwire assumptions of subscriber counts and rates charged for services their projection amounts are supported by those assumptions. Also, their projection amounts and pricing are consistent with similar systems as discussed in Section 3 of this report.

5.0 FIBRANT HISTORICAL OPERATING COSTS

5.1 – Scope Task: Evaluate and analyze Fibrant's historical operating costs

In this area, we summarized and commented on Fibrant's historical and budgeted operating costs and financial results. This analysis was done to set an expected baseline of financial performance if the City continues to operate Fibrant.

5.2 – Procedures

Our procedures consisted of the following steps:

1. Read the City of Salisbury's audited financial statements contained in its Comprehensive Annual Financial Report (CAFR) for the years ended June 30, 2011 through June 30, 2017 for the results of operations of Fibrant. These results are contained in:

    a. Schedule A-8 *Statement of Revenues, Expenditures, and Changes in Funds Net Position – Proprietary Funds* [10]

    b. Schedule D-3 *Broadband Services Fund – Schedule of Revenues and Expenditures – Budget and Actual (Non-GAAP)*[11]

2. Discussed the statements with the City's Finance team to gain insights into the accounting and budgeting process for Fibrant

5.3 – Observations

For purposes of our observations, we used the statements in Schedule D-3 as the modified accrual basis of accounting is more relevant to operating a business enterprise such as Fibrant, since this basis more closely resembles the cash basis of accounting.

[10] **Schedule A-8** is prepared on the full accrual basis of accounting, which records revenues when earned and expenses when incurred, regardless and is the required accounting method under Generally Accepted Accounting Principles (GAAP) for audited financial statements.

[11] **Schedule D-3** is prepared on the modified accrual basis of accounting. Modified accrual accounting is an accounting method commonly used by government entities that combines accrual-basis accounting with cash-basis accounting. Modified accrual accounting recognizes revenues when they become available and measurable and recognizes expenditures when liabilities are incurred.

The historical financial statements from Schedule D-3 for FY 2011 through FY 2017 are shown in Table 12:

Table 12 – Fibrant System Historical Financial Results – FY 2011 through FY 2017 – Modified Accrual Basis of Accounting

Revenues and Expenditures	Modified Accrual - Actual						
	FY11	FY12	FY13	FY14	FY15	FY16	FY17
OPERATING REVENUES							
Charges for Services	$ 610,075	$ 2,595,832	$ 3,417,445	$ 4,428,763	$ 5,570,429	$ 5,548,319	$ 4,860,507
Other Operating Revenues	-	25,336	439,465	382,994	522,374	522,574	232,560
Total operating revenues	610,075	2,621,168	3,856,910	4,811,757	6,092,803	6,070,893	5,093,067
OPERATING EXPENSES							
Management and Administration	$ 462,523	$ 315,421	$ 319,785	$ 174,757	$ 37,413	$ 27,651	$ 350,137
Sales and Marketing	209,016	-	-	-	-	-	293,099
Programming	315,656	1,168,390	1,497,532	1,588,956	1,815,216	1,826,263	1,803,970
Broadband Services	650,862	319,384	170,342	180,534	236,170	288,896	1,356,205
Services Delivery	354,259	2,616,384	1,297,906	1,015,440	845,929	801,087	1,460,325
Total operating expenses other than depreciation	1,992,316	4,419,579	3,285,565	2,959,687	2,934,728	2,943,897	5,263,736
NONOPERATING REVENUES (EXPENDITURES)							
Investment earnings	$ 1,065	$ 120,568	$ 63,139	$ 103,476	$ 13,857	$ 12,591	$ 3,267
Refunding bonds issued	-	-	-	-	-	-	28,990,000
Payment to refund bond escrow agent	-	-	-	-	-	-	(31,972,437)
Capital outlay	-	(171,518)	(55,669)	-	-	-	(107,590)
Payment of debt principal	-	-	-	(420,000)	(1,743,000)	(1,809,000)	(1,820,000)
Payment of inter-fund loan principal	-	-	-	-	-	(25,000)	(50,000)
Bond issuance costs	-	-	(2,073,473)	-	-	-	
Interest expense and fees	(868,297)	(1,549,509)	(1,791,739)	(1,306,524)	(1,345,764)	(1,281,377)	(511,082)
Net nonoperating expenditures	(867,232)	(1,600,459)	(3,857,742)	(1,623,048)	(3,074,907)	(3,102,786)	(5,467,842)
Revenues over (under) expenditures	(2,249,473)	(3,398,870)	(3,286,397)	229,022	83,168	24,210	(5,638,511)
OTHER FINANCING SOURCES (USES)							
Interfund Loan	$ 1,194,694	$ 3,398,870	$ 2,583,397	$ -	$ -	$ -	$ -
Refunding bonds issued	-	-	16,928,000	-	-	-	-
Payment to refunded bond escrow agent			(16,225,000)				
Operating Transfers from General Fund	-	-	-	-	-	-	2,315,458
Total other financing sources (uses)	1,194,694	3,398,870	3,286,397	-	-	-	2,315,458
REVENUES OVER/(UNDER) EXPENDITURES AND OTHER FINANCING SOURCES (USES)	(1,054,779)	-	-	229,022	83,168	24,210	(3,323,053)

The financial statements show a wider variance in annual expenses from year to year over the periods shown (FY 2011 – FY 2017). These variances were discussed with the City of Salisbury Finance Team in the next section.

Discussion with City of Salisbury Finance Team on Fibrant System Operating Results

We discussed the historical Fibrant System operating costs with the City of Salisbury's Finance team ("team"). The team stated the following observations on the historical amounts:

> The team considers the costs recorded in FY 2017's financial statements to be more reflective of a "normal year of operations" for Fibrant for the recording of all of the direct costs of operations.

> The team also considers the FY 2018 budgeted costs for Fibrant to be reflective of a normal year of operations for Fibrant for the recording of all of the direct costs of operations.

> The team stated the amounts recorded as operating costs of Fibrant do not include any allocations of indirect costs of the City's operations.

  – For example, it is a best and common practice in governmental accounting to allocate a portion of "indirect costs" for shared services, such as finance and accounting, technology, human resources, payroll, accounts payable and governance costs to all governmental funds or proprietary funds of the City based on a pre-determined and agreed-to allocation factor, such as revenues, full-time equivalent employees and other methods. The major governmental or proprietary funds of the City include:

General Fund	Special Revenue Fund
Water Fund	Sewer Fund
Broadband Services Fund	Stormwater Fund
Mass Transit fund	

If one of the City's funds is under-allocated its share of these indirect costs that means that another fund has been over-allocated its share of the indirect costs. Determining what the total allocated costs are and those that should be allocated to the Broadband Services Fund (i.e., Fibrant System) is outside of the scope of this engagement, so we did not determine what a proper cost allocation should be to Fibrant. But, based on the fact that indirect costs are not allocated to the Fibrant System, our conclusion is that Fibrant's historical operating costs as reported are understated by an amount for indirect cost allocations.

Additional Comments on Fibrant Financial Results

As the City Finance Team indicated that the FY 2017 financial results are those of a normal year of operation for the recording the direct costs of operations of Fibrant, we will not comment on any of the historical operating results for years prior to FY 2017. As such, we have the following comments on the FY 2017 results:

FY 2017 Results

The FY 2017 financial results reflect the following observations:

1. The Fibrant System shows an operating loss (Operating Revenues less Operating Expenses) in FY 2017 of ($171,000). This means that revenues from charges for services were less than the cost of providing those services.
2. The operating costs for FY 2017 are understated by an unknown amount due to City indirect costs not being allocated to Fibrant, so the operating loss of ($171,000) would be somewhat larger by that undetermined amount.
3. In September 2016, the City refinanced the existing long-term debt on the Broadband Services Fund through a Refunding Certification of Participation (COP), which had the effect of reducing total debt service payments over a 13-year period (end of FY 2029) by approximately $2.3 million.
4. The Fibrant System was budgeted to achieve an operating profit of $558,000 in FY 2017; however, operating revenues were $1.5 million less than budgeted and operating expenses were $753,000 less than budgeted.
5. Operating revenues have declined by $1 million since their peak in FY 2015.
6. The City of Salisbury transferred $2.3 million to Fibrant during FY 2017 to aid in increasing its cash flows available to pay debt service, capital outlay, and operating costs.
7. The Fibrant System shows a negative cash flow of $5.6 million (Operating revenues less operating expenses less capital outlay less debt service) before the transfer from the General Fund.

8. The ***capitalization ratio*** is a measure of the proportion of debt in an organization's financial structure. A higher ratio indicates a lesser ability to utilize financial leverage for using debt in the future to finance needed long-term infrastructure investments. The capitalization ratio of Fibrant for the Fiscal Year ending on June 30, 2017 is shown in Table 13:

Table 13 – Fibrant System Capitalization Ratio

Description		Amount
Current portion of bonds, notes and loans payable	$	2,030,000
Long-term portion bonds, notes and loans payables		25,140,000
Due to other funds		7,102,000
Net pension liability		377,000
Other post-employment benefits		225,000
Total liabilities for calculation of capitalization ratio	$	34,874,000
Total assets and deferred outflow of resources	$	26,103,000
Capitalization ratio		134%

The capitalization ratio of 134% means that Fibrant owes 34% or $8,771,000 more of these liabilities than it has in assets.

9. **Day's cash on hand** is another measure of financial strength. Common practice in a business-type operation like Fibrant is to have a minimum of 30 days cash on hand to fund operating expenses. Bond rating agencies generally give organizations with at least 90 days cash on hand a rating on their outstanding debt of "investment grade" and those with less than 30 days cash on hand a "speculative grade[12]".

   The **day's cash on hand** ratio for Fibrant as of June 30, 2017 was 13 days[13]. This is well below the minimum common best practice.

10. The **Net position** of Fibrant was a negative ($9,800,000) as of June 30, 2017. This means that Fibrant has experienced losses of $9.8 million since beginning business[14].

[12] Moody's subscriber information on utility methodologies accessible after setting up free user-id - https://www.moodys.com/researchandratings/methodology/003006001/rating-methodologies/methodology/003006001/003006001/-/-1/0/-/0/-/-/en/global/rr
[13] (Available cash x 365 days)/Annual operating expenses = ($190,000 x 365)/$5,300,000 = 13 days
[14] This is based on the accrual basis of accounting **Schedule A-8** in the City's CAFR.

6.0 COMPARISON OF EXPECTED LEASE PAYMENTS VERSUS CONTINUED FIBRANT OPERATIONS

6.1 – Scope Task: Compare the expected lease payments to the City to projected operating results if the City were to continue to operate Fibrant and achieve the same revenues projected by the third-party lessee.

In this area, we reviewed and commented on the comparison of the City's projection of Fibrant's operating results to the third-party lessee's projected results.

6.2 – Procedures

1. Baker Tilly read the City of Salisbury's published FY 2018 budget for Fibrant.
2. Baker Tilly read the Hotwire prepared projection of revenues from operation of Fibrant for FY 2018. Baker Tilly then assigned the multiplier percentages according to the lease document.
3. Baker Tilly prepared a schedule comparing the City of Salisbury budget for FY 2018 and the Hotwire prepared projection of total revenues from each service type times the percentages for each type of service in the lease document for FY 2018.
4. Baker Tilly discussed Fibrant's operations and future plans with the Fibrant Director and members of the Fibrant team.
5. Baker Tilly reviewed any relevant federal, state, or local legislation or regulations that could have an impact on Fibrant's business operations or a third party lease agreement arrangement.

6.3 – Observations

The comparison of cash flows from the City of Salisbury FY 2018 budgeted results and the projected payments of revenues to be received from Hotwire for FY 2018 are shown in Table 14. The column entitled "City's Budgeted" indicates the cash flow per the City's filed FY2018 budget plan, which reflects continued operations of the Fibrant system; whereas the following column entitled "Third Party Lease" reflects strictly the city's portion of revenues to be received through a third party lease arrangement with Hotwire. The last column shows the variance of these two scenarios, reflecting the fact that under a third party lease arrangement, the City would not have any operating costs tied to the Fibrant system.

Table 14 – Comparison of Cash Flows – City of Salisbury FY 2018 Budgeted Results for Fibrant System and Projection Lease Revenues Based on Proposed Lease Agreement

Revenues and Expenditures	City's Budgeted FY18	Third Party Lease FY18	Variance FY18
OPERATING REVENUES			
Charges for Services	$ 5,156,506	$ 1,041,249	(4,115,257)
Other Operating Revenues	229,480	-	(229,480)
Total operating revenues	5,385,986	1,041,249	(4,344,737)
OPERATING EXPENSES			
Administration & Sales	832,666	-	(832,666)
Programming	1,811,137	-	(1,811,137)
Engineering & NOC	1,414,441	-	(1,414,441)
Installation Services & Outside Plant	1,147,554	-	(1,147,554)
Total operating expenses other than depreciation	5,205,798	-	(5,205,798)
NONOPERATING REVENUES (EXPENDITURES)			
Investment earnings	-	-	-
Refunding bonds issued	-	-	-
Payment to refund bond escrow agent	-	-	-
Capital outlay	(449,886)	-	449,886
Payment of debt principal	(2,030,000)	(2,030,000)	-
Payment of inter-fund loan principal	(300,000)	(300,000)	-
Bond issuance costs	-	-	-
Interest expense (debt service)	(547,165)	(849,302)	(302,137)
Interest expense (inter-fund loan)	(71,020)	(71,020)	-
Net nonoperating expenditures	(3,398,071)	(3,250,322)	147,750
Revenues over (under) expenditures	(3,217,883)	(2,209,073)	1,008,810
OTHER FINANCING SOURCES (USES)			
Operating Transfers from General Fund	3,217,883	2,209,073	(1,008,810)
Total other financing sources (uses)	3,217,883	2,209,073	(1,008,810)
REVENUES OVER/(UNDER) EXPENDITURES AND OTHER FINANCING SOURCES (USES)	-	-	-

The comparison in the previous table shows that if Fibrant achieves the results of the City's FY2018 budget it will have a negative cash flow of $3.2 million after payments of operating expenses, capital outlay and debt service. The budget offsets the negative cash flow with a transfer to Fibrant from the General Fund of $3.2 million.

If Fibrant were to operate under the terms of the proposed Hotwire lease, based on the Hotwire projections, Fibrant would have a negative cash flow of $2.2 million after payment of debt service. This scenario also reflects that under a proposed Hotwire lease, the City's annual debt service payments would be slightly higher due to a higher interest rate of 4.25% versus 2.06%. The higher interest rate of 4.25% reflects current interest rate projections and should be utilized as the City's debt service on the bonds would be taxable under this scenario of a third party lease. Overall, the negative cash flow would still necessitate a transfer from the City's General Fund of $2.2 million, but this would be $1.0 million less than if Fibrant continued to operate the system without the lease agreement. [15]

We understand that the lease terms, if accepted, will close after the close of FY 2018. However, this comparison was made using the City's FY 2018 budget as the City's FY 2019 budget has not yet been prepared and there have been no longer-term forecasts of operations prepared by the City for Fibrant. As a forecast for Fibrant was not available FY 2018, the direct comparison to Hotwire's third party lease arrangement was only prepared for FY 2018. Any details regarding future Hotwire revenue projections and the corollary City's share of revenues is summarized in Section 2.3 of this report. Based on discussions with Hotwire, they indicate that it is unlikely that Fibrant could reduce its operating costs sufficiently to generate similar revenues that Hotwire is proposing to the City.

We reviewed the North Carolina House Bill 129 (HB 129) known as the "Level Playing Field Act," which became law in 2011.[16] The purpose of this act was to regulate local government competition with private businesses. A provision for communication services provided by cities states that municipal broadband systems may not directly or indirectly engage in competition. A City-owned communications service provider is any city that provides communications service using a communications network, whether directly, indirectly, or through an inter-local agreement or a joint agency.

Pertaining to the City of Salisbury, according to the Level Playing Field Act, Fibrant is only able to provide service to a specific service area that encompasses Salisbury and eight other municipalities in Rowan County and the corridors between those cities. The service area also includes governmental facilities and educational institutions. The governing bodies of the municipalities and institutions would have to vote to approve the service extension into each respective area before Salisbury can provide the service.

Additional observations

In connection with this task we have the following additional observations.

Comments on continued operation of Fibrant by the City

<u>Discussions with the City's Finance Team</u>

Baker Tilly discussed the finances of Fibrant with the City Finance Team. They had the following comments and observations:

1. They indicated that annual budgets are prepared for Fibrant, but a longer-term forecast, or projection of the operating results of Fibrant, have not been prepared. A prepared long-term financial forecast would allow a comparison of Fibrant's expected results to expected payments from Hotwire under the lease agreement.

[15] Under the lease term all other costs would be borne by Hotwire

[16] https://www.ncga.state.nc.us/Sessions/2011/Bills/House/PDF/H129v6.pdf

2. Indirect costs from the City are not allocated to Fibrant, so operating expenses are understated in the FY 2018 budget

Discussion with the Fibrant Team

Baker Tilly also discussed plans for Fibrant with the Interim Director of Fibrant and members of the Fibrant team. They had the following comments to our questions:

1. Fibrant is proud of the service they provide to the Salisbury community. The technology of the Fibrant system is second-to-none and its employees work hard to provide their customers with outstanding service and a great customer experience.
2. Regarding our question on whether there are long-term financial projections for Fibrant, they stated that any long-term projections would be completed by the Finance area of the City. Note: The City Finance Team indicated that long-term financial projections have not been prepared beyond the FY 2018 budget.
3. Fibrant does have a longer term capital improvements budget for specific equipment, adding customer equipment and replacement equipment.
4. Fibrant does not have a long-term strategic plan prepared. They stated that this was requested of the City Council in 2017 but funding was not approved. They stated that the infrastructure is well maintained and built for future expansion.
5. Regarding plans to increase the subscriber base, Fibrant has the following initiatives in place:
    a. It is seeking new subscribers through direct mail, social media and referrals.
    b. They have had some success in signing new commercial customers.
    c. The goal is a 40% penetration rate for residential customers.
    d. Fibrant has 30% of the commercial market but is running into some resistance and churn on customers due to the uncertainty of the outcome of the proposed lease agreement and its perceived impact on Fibrant.
    e. They are planning to determine optimal price points to increase their competitive position.
    f. The system is state-of-the-art and built to meet current customer demands and future growth. There may need to be some additions to specific equipment – headend, video platform – to meet changes in technology and improve the customer experience with video. There will be needed buildouts to serve certain commercial customers they could attract.
6. Regarding a question Baker Tilly had on the decline in customer revenues of $1 million from their peak in FY 2015:
    a. There have been targeted marketing campaigns by competitors leading to customer churn and lack of retention.
    b. Negative publicity about the future of Fibrant is leading to issues in obtaining commercial customers.
    c. The tone with the uncertainty of the outcome and future state of Fibrant has been negative, which leads to issues in obtaining customers.
    d. Fibrant is hampered in obtaining new subscribers by not being able to offer new subscribers introductory specials for signing up for service. Their competitors can offer specials. This is

due to state legislation (i.e., HB 129) that specifically restricts municipal broadband providers from offering these introductory specials, while non-municipal providers are not bound by this provision of HB 129.

It is clear from our conversation with the Fibrant team that they take pride in the service they provide to Fibrant customers.

Comments on information in the City's FY 2017 audited financial statements

Information on Fibrant is also noted in the City of Salisbury's FY 2017 CAFR. These comments from the CAFR are as follows:

1. On page 32 of the City's June 30, 2017 CAFR, it is stated "As mentioned in the financial highlights section of this document, the City's bond ratings are strong and stable. In October 2013, Standard and Poor's (S&P) upgraded the general obligation debt to AA- (from an A+). Conversely, in April 2014, Moody's Investors Services downgraded the general obligation debt from A1 to A3 and the 2010 revenue refunding bonds from Aa3 to A3. In April 2015, Moody's affirmed those ratings. Fitch affirmed its ratings on the revenue refunding bonds of A+ in August 2015. The ratings downgrades from Moody's and Fitch were due to the losses incurred in the Broadband Services Fund and the inter-fund loans from the Water and Sewer Fund to the Broadband Services Fund in prior years".
2. On page 34 of the June 30, 2017 CAFR, it is stated "The City's Fiber-to-the-Home enterprise provides performance and reliability that are second to none. The financial performance of the system, however, faces significant challenges. The Broadband Services Fund will continue to depend on contributions from the General Fund until revenues become sufficient to cover all expenses of the fund. The FY18 budget includes $300,000 in principal payment on its inter-fund loan from the Water and Sewer Fund."

Additional Baker Tilly comments

In operating a competitive business like Fibrant it is critical to have these tools in place:

1. A long-term strategic business plan that outlines the goals of the business, expected financial performance, pricing, capital improvement plans, and competitive analysis. This document should be updated annually.
2. A long-term financial forecast of operations, ideally for 10 – 20 years.
3. A long-term capital improvement plan and budget for the business. While the fiber infrastructure may have up to a 20 year life (in a fiber to the premise system), changing technology renders the expected life of some of the equipment used in providing service to customers to only a 10 year useful life. This means that having a specific long-term capital improvement plan in place is critical for planning purposes to maintain customer service and subscriber retention.

These tools are needed to chart the long-term course of the business, especially in a business like broadband delivery in which there are multiple competing businesses and platforms for customers. These are not currently in place at Fibrant.

Based on discussions with Hotwire, they indicate that it is unlikely that Fibrant could reduce its operating costs sufficiently to match Hotwire's costs and also generate similar revenues that Hotwire is proposing to the City.